

OLIGODEOXYNUCLEOTIDE AND ITS USE TO INDUCE AN IMMUNE RESPONSE

D type CpG oligodeoxynucleotides are provided herein that include a sequence represented by the following formula:

5



wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10. Methods of using these oligodeoxynucleotides to induce an immune response are provided.

10